

NOV 23 2005

November 22, 2005

Examiner Feben M. Haile  
United States Patent Office  
Art Unit 2663

Dear Examiner Haile,

This is an informal response to the last office action, dated 08/22/2005, in application 10/001597 (*Messaging system utilizing proximate communications with portable units*).

The following discussion presents a summary of history we believe may be relevant to examination of the present application, a brief explanation of the more limited subject matter we want to pursue in further prosecution, and a single proposed claim defining this more limited subject matter. We would appreciate an informal response to this proposed claim, and based on your comments, may consider submitting such a claim by amendment (with an appropriate extension of time) or continuation.

We note that this application is filed by the inventors *pro se*, and the applicants respectfully request the constructive assistance and suggestions of the Examiner pursuant to M.P.E.P. § 2173.02 and § 707.07(j) in order that the undersigned can place this application in allowable condition as soon as possible and without the need for further proceedings.

#### History and Status

In 2001, we designed a messaging system. When considering patent options, we felt that there were four distinct novel elements in the system. Since it is inappropriate to include more than one invention in a patent application, even if multiple inventions work in concert in the preferred embodiment, we elected to file four patent applications despite the additional expense. These applications were filed at the same time (Oct 23, 2001), have the same inventors, and nearly identical specifications (the disclosure of the preferred embodiment is identical, and the only variation is in sections such as comparison to prior art).

During prosecution, we have discovered two important points. First, the claims language we used for some elements was not sufficiently precise; examination has revealed unexpected ways of reading the claim language to include very different subject matter, quite far outside the intended scope of the claims. Second, the most patentable subject matter appears to involve the combination of elements in a more complete definition of the functionality achieved by the preferred embodiment of the present invention.

For example, the claims did not reliably convey the notion that what we called "messaging nodes" are, in clearer parlance, "access points". We have had rejections on the basis of prior art where "messaging nodes" were equated to e-mail addresses, and a messaging system (intended as a network with a novel access point infrastructure) became nothing more than an e-mail distribution list. We never intended to claim subject matter so unrelated to access point

infrastructure, and since it was apparently possible to read our claims in such a manner, this is evidence of deficiencies in our claim language.

In light of these two discoveries, we are considering filing a single continuation application, and abandoning all four original applications. This would consolidate the patent into a single application, which we feel is more appropriate in light of our present intent, which is to claim a combination of elements that were originally presented in separate applications. This would also let us re-write the resulting claims in much clearer form, in light of what we have learned about how the original claims can be read in entirely unintended ways.

Since the specification describes a preferred embodiment applying the combination of all these elements, the original specification is sufficient for supporting such a revised set of claims. There is no new material, merely a consolidation and narrowing of claims.

### **Prospective Amendment**

Instead of going directly to a continuation application, we would like to consider the alternative of amending the present application to submit these claims for examination. This may be a more direct approach than filing a continuation. However, due to the significant changes from the originally presented claims, we feel that it is appropriate to check with you before making such an amendment. In this respect, we have two questions.

First, do you feel that a revised claim (presented below) should be submitted by amendment, or would that be an inconvenience for you, given the significant changes from the original claims presented in this application?

Second, if you feel that such an amendment is an appropriate way to obtain examination of this claim, do you have any initial responses or comments regarding the proposed claim? It would obviously be easier to address any concerns in an interview at this stage, while the last office action is non-final.

### **Intended Subject Matter**

To help draw your attention directly to the intended subject matter of further prosecution, here is a brief explanation of the invention, in the narrower aspect that we want to claim at this time.

As is commonplace today in the age of wireless internet, a messaging system provides two-way communication for multiple users who read and compose messages on handheld portable devices.

However, the "access points" in this messaging system are frequently cut off from the main body of the network (i.e. no communications path available), and therefore these "access points" cannot behave like conventional access points (i.e. provide a real-time communications path between the locally connected device and the rest of the network).

To remedy this problem, we associate a user's account with a set of access points (for example, user X might be associated with five access points in a certain geographical district of

Chicago), and (during infrequent occasions when a communications path exists between such an access point and the rest of the network) we locally buffer incoming messages for that account at each access point associated with that user. In this manner, incoming messages for a user are locally stored at every access point associated with that user, so the user can collect new messages at any of these access points.

An individual portable messaging unit can be connected to any of these access points, and all locally buffered copies of a message (at each access point) have the same destination address. This is unlike the forwarding of a message to multiple destinations owned by a single user, where each destination has a distinct delivery system (e.g. forwarding of e-mail to work and home addresses, and also to a cellphone text messaging system). Like an ordinary network of access points, the present invention is a delivery system where a single account's new messages can be collected from several access points.

As a result, the access points will behave normally for the collection of messages, despite the fact that these access points usually have no communications path to the rest of the network, and are probably disconnected at the time the user collects messages.

Finally, once a message is collected, that access point generates an administrative message that is sent to all other access points with a local copy of the original message, saying that the original message has been delivered and all locally buffered copies should therefore be deleted from access points.

This is a network infrastructure that allows for message delivery through access points that are frequently disconnected (no communications path available) from the main network that they "access", even when the messaging system lacks specific foreknowledge of where message delivery will be requested.

It is evident that this invention could be used, in a mix-and-match sense, with conventional access points. The preferred embodiment describes such a combination, because if a network includes any access points with a reliable communications path to the main network, then it is obviously sensible to use both conventional and novel methods where appropriate.

### **Proposed Claim**

With the foregoing description of our intended subject matter, here is a proposed new claim, intended to describe this combination of elements in clearer language. This proposed claim is most closely related to claim 19 in the present application.

A messaging system for the delivery of messages through access points to portable messaging units, when a communications path between individual access points and the rest of the messaging system is frequently disconnected and not available for the exchange of information, said messaging system comprising:

A central server,

A plurality of access points, each with a first communications path to said central server, where said first communications path is periodically disconnected and not available for the exchange

of information,

A plurality of user accounts, each with a distinct messaging address identifier,

An association table, associating individual user accounts with a plurality of said access points, where at least one user account is associated with at least two different access points,

A plurality of portable messaging units, each with user interface means for the display of messages, communications means for establishing a second communications path with any of said access points, and identification means for identifying an active user account on a portable messaging unit,

said method comprising:

locating a messaging address identifier in an incoming message at said central server, where said messaging address identifier identifies a single recipient of said incoming message,

identifying a user account associated with said messaging address identifier,

identifying a set of access points associated, in said association table, with said user account, collectively comprising a primary messaging zone,

transmitting said incoming message to each access point within said primary messaging zone, when a first communications path is available to each of these access points,

storing said incoming message at each access point within said primary messaging zone, when said incoming message is received from said central server over said first communications link,

connecting a portable messaging unit to a single selected access point within said primary messaging zone via said second communications path, while said first communications path between said selected access point and said central server is disconnected and not available for the exchange of information,

providing identification of an active user account on said portable messaging unit to said selected access point,

transmitting a stored incoming message for said user account from said selected access point to said portable messaging unit over said second communications path, while said first communications path between said selected access point and said central server remains disconnected and not available for the exchange of information,

deleting said stored incoming message from said selected access point,

transmitting an administrative message from said selected access point to said central server, when said first communications link between said selected access point and said central server becomes connected and available for the exchange of information, where said administrative message identifies said incoming message and indicates that said incoming message has been successfully delivered to the user,

transmitting an administrative message from said central server to each access point where said incoming message was stored, when a first communications path is available to each of these access points,

deleting said stored incoming message from each access point where said administrative message is received,

thereby delivering an incoming message to a specific message recipient using a portable messaging unit, through any selected access point associated in said association table with this specific message recipient, when a communications path between the selected access point and the rest of the messaging system including the central server is frequently disconnected and not available for the exchange of information.

### **Drawings**

We have attached a draft set of revised drawings, with elements identified by descriptive labels, in response to objections raised in the last office action. In addition, we have attached a sheet with drafts of two additional drawings that may more clearly illustrate certain aspects of the invention. The substance of these new drawings is contained in the original specification.

One new drawing shows the role of the messaging nodes (access points), and the way users are associated with specific groupings of these nodes (messaging zones) through an association table.

The other new drawing shows the sequence of events in the delivery of an incoming message. The message is buffered at multiple nodes in a messaging zone, delivered from one node, and then deleted from others. The relative timing of these events is shown in relation to when intermittent communications paths are available and unavailable between elements of the messaging system.

### **Conclusions**

If you feel there is potentially patentable subject matter in this proposed claim, and that it would be appropriate to submit this claim (or a similar claim covering the indicated subject matter) for examination by amendment, then we will pursue that course.

We understand that this is a significant change from claim 19, with a more complete definition of the messaging system and the intended nature of "proactive buffering" within that system. If you feel that these changes are sufficiently large to make examination within the present application inappropriate, we can present this claim in a continuation application.

If you feel that the indicated subject matter is not patentable, and informally reply with an explanation, we will abandon the application without further formal steps, and will not file a response to the last office action.

We appreciate your review of this correspondence, and await your reply.

## Reference

For reference, this is a list of the original four patent applications, all filed on October 23, 2001:

- \* 10/001597 Messaging system utilizing proximate communications with portable units
- \* 10/001361 Proactive message buffering across intermittent network connections
- \* 10/001550 Firmware portable messaging units utilizing proximate communications
- \* 10/001703 Message prioritization and buffering in a limited network

We are including copies of the notice of references cited for each of the other three applications. Particular attention should be drawn to the following patents, which appear to be the principal basis for the rejection of claims in these related applications: Vaudreuil (US 5,740,230), Modiri et al (US 6,192,401 B1), Leonard et al (6,721,784 B1), Ulrich (US 6,052,735), and Wong (US 5,974,465). Of course, not all of these citations relate to the particular form of the invention defined by the proposed claim, but we want to be forthcoming with all potentially relevant information in the history of all related applications.

Sincerely,



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<b>Notice of References Cited</b>	Application/Control No. 10/001,550		Applicant(s)/Patent Under Reexamination LARDIN ET AL.	
	Examiner Philip J. Chea		Art Unit 2153	Page 1 of 1

## U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-5,522,089 A	05-1996	Klkinis et al.	710/73
	B	US-5,978,569 A	11-1999	Traeger, Robert J.	709/244
	C	US-6,052,735 A	04-2000	Ulrich et al.	709/236
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
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	M	US-			

## FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
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## NON-PATENT DOCUMENTS

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	U	
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 PTO-892 (Rev. 01-2001)

Notice of References Cited

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<b>Notice of References Cited</b>	Application/Control No. 10/001,361	Applicant(s)/Patent Under Reexamination HOLBROOK ET AL.	
	Examiner KAMAL B. DIVECHA	Art Unit 2151	Page 1 of 1

## U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-5,740,230	04-1998	Vaudreuil, Gregory M.	379/88.22
*	B	US-6,192,401	02-2001	Modiri et al.	709/220
*	C	US-6,105,080	08-2000	Rothblatt, Martine A.	709/219
*	D	US-5,195,183	03-1993	Miller et al.	709/231
*	E	US-6,721,784	04-2004	Leonard et al.	709/208
*	F	US-6,049,813	04-2000	Danielson et al.	708/100
*	G	US-6,272,545	08-2001	Flanagan et al.	709/228
*	H	US-6,539,421	03-2003	Appelman et al.	709/208
*	I	US-5,727,159	03-1998	Kikinis, Dan	709/246
*	J	US-5,563,881	10-1996	Perelman et al.	370/428
*	K	US-6,826,551	11-2004	Clary et al.	706/46
*	L	US-6,014,559	01-2000	Amin, Umesh J.	455/413
*	M	US-5,868,848	09-1997	Stuart, James R.	370/321

## FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
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## NON-PATENT DOCUMENTS

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PTO-892 (Rev. 01-2001)

Notice of References Cited

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<b>Notice of References Cited</b>	Application/Control No. 10/001,703	Applicant(s)/Patent Under Reexamination SULLIVAN ET AL.	
	Examiner Phuoc H. Nguyen	Art Unit 2143	Page 1 of 1

## U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-5,974,465 A	10-1999	Wong, Shian-Tung	709/234
	B	US-2002/0194342 A1	12-2002	Lu et al.	709/227
	C	US-2002/0056006 A1	05-2002	Vange et al.	709/235
	D	US-6,792,470 B2	09-2004	Hakenberg et al.	709/232
	E	US-2002/0004838 A1	01-2002	Hakenberg et al.	709/231
	F	US-6,189,027	02-2001	Haneda et al.	709/206
	G	US-			
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	I	US-			
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	L	US-			
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## FOREIGN PATENT DOCUMENTS

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PTO-892 (Rev. 01-2001)

Notice of References Cited

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